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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 09/133,960  
Filing Date: August 14, 1998  
Appellant(s): JOSHI ET AL.

\_\_\_\_\_  
Nathaniel T. Wallace  
Reg. No. 48,909  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed January 12, 2009 appealing from the Office action mailed January 5, 2007.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

5,999,970	KRISBERGH	12-1999
6,026,086	LANCELOT ET AL.	02-2000

6,141,356	GORMAN	10-2000
5,561,703	ARLEDGE ET AL.	10-1996
5,991,596	CUNNINGHAM ET AL.	11-1999
6,320,941	TYROLER	11-2001
6,026,086	SCHEIN ET AL.	07-2001
5,812,931	YUEN	09-1998
6,285,407	YASUKI ET AL.	09-2001

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

***Drawings (2<sup>nd</sup> Objection to Drawing)***

1. The drawing of Fig. 2 is objected under 37 CFR 1.83(a). Fig. 2 represents both communication units 104 (1<sup>st</sup> communication unit and 2<sup>nd</sup> remote communication unit); however, according to Applicant's specification and Fig. 1, the 1<sup>st</sup> communication unit 104 (on receiving side) has only one I/O communication path with the transceiver 106A and one output port connects to television display 103. On the other hand, the 2<sup>nd</sup> remote communication unit 104 (on transmitting side) has at least one I/O communication path with the satellite transceiver 106A and another I/O with the Server 110.

Thus, for clarification purpose and for consistency with Fig. 1, **Applicant is required to provide a modification of Fig.2 with two separate communication units.**

**one at the receiving side comprises I/O coupled to satellite transceiver 106A and an output coupled to television set 102, and**

**another one, at the transmitting side, comprises I/O coupled to satellite transceiver 106A and I/O coupled to server 110.**

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 3-5, 8-11, and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Krisbergh et al. (US 5999970) in view of Lancelot et al.(US 6026086)

Regarding claim 1, Krisbergh shows a wireless information signal transfer (Col. 3, lines 17-27) and interactive television system (Col. 1, lines 60-Col. 2, lines 35) comprises:

At least a 1<sup>st</sup> communication system (Fig. 1, e. 54,16,56,58), operatively coupled to a television set (Fig. 1, element 56), comprising a 1<sup>st</sup> RF transceiver unit and a 1<sup>st</sup> data processing unit (Fig. 6, set top convert 54 has an RF transceiver 94/106 and processor 96) for generating at least one information signal ("the command input into the Set Top Converter 54 by the inputting device 58 wherein the Set Top Converter 54 generates a display signal "text/command signal" for display on the television set 56 such as on-line Chat sessions, URL for browsing through the information source... see Fig. 6, Col. 4, lines 51-65 and then the text/command signal is transmitted by an upstream transmitter 106 on an RF-modulated upstream channel 22 ...", Col. 4, lines 48-55) and for generating at least one display signal for

display on the television set (by receiving a television program along with sequential portions of the "received information" inserted in the VBI at the Set Top Converter 54, the Set Top Converter 54 generates a television program display or extracts a "received information" from VBI, and then the Set Top Converter 54 displays the received TV programming or the received information on the television 56 respectively, see Col. 4, lines 36-65).

A wireless signal transfer network (Fig. 1, network 12; Col. 3, lines 17-27), operatively coupled to the at least a first communication system (Fig. 1, e. 54,16,56,58), for wirelessly transferring signals including the at least one information signal;

At least a second communication system (Fig. 1, el. 34) operatively coupled to the wireless transfer network 12, comprising a 2<sup>nd</sup> RF transceiver unit (Fig. 1, el. 36) and a 2<sup>nd</sup> data processing unit (Fig. 1, el. 38) for receiving and processing the at least one information signal (Cable HeadEnd 36 receives the inputted "command" on the upstream channel of the distribution network 12; Col. 4, lines 48-60);

A server (Fig.1, element 38), operatively coupled to the at least a second communication system (Fig. 1, el. 34), for receiving and processing the at least one information signal (a 'command') and providing data included in the information signal to a functional network 60 (the HeadEnd Server 38 receives the forwarding "command" from the Cable HeadEnd Equipment 36, then the HeadEnd Server 38 transmits a 'command' based on the forward command to the information source 60; Col. 4, lines 48-60), wherein the server retrieves return data from the functional

network (reads on Krisbergh 's information source 60 (functional network) transmits the 'information' to the HeadEnd Server 38 (server) in which the HeadEnd Server 38 receives/retrieves/processes the 'information', see Col. 6, lines 49-53 and Col. 9, lines 8-10) and provides the return data to the at least a 2<sup>nd</sup> communication unit 36 (reads on the HeadEnd Server 38 receives/retrieves/processes the 'information' and then forwards/provides the 'information' (return data) to the VBI inserter 90 of the Cable HeadEnd Equipment 36 (a 2<sup>nd</sup> communication unit), see Col. 6, lines 47-52; Col. 7, lines 32-35), the at least a 2<sup>nd</sup> communication system (Fig. 1, el. 34), generating at least one return information signal (return data, downstream channel 20) and providing the at least one return information signal to the wireless network 12 (wireless network; Col. 7, lines 35-57), the wireless signal transfer network wirelessly transferring the at least one return information signal (return data) to the at least a 1<sup>st</sup> communication (Fig. 1, e. 54,16,56,58), which generates the at least one display signal for display on the TV set 56 (Col. 6, lines 47-Col. 7, lines 20 and Col. 8, lines 18-60), wherein the at least one information signal ("command") is independently transmitted from a TV signal (could be read on either the 'command' is from the upstream channel and is independently/separate from the downstream channel or the Cable HeadEnd Equipment 36 (a TV signal) and the HeadEnd server 38 independently transmits the received 'command' (information signal) from the set top converter 54 to the ISP 60, see Col. 5, lines 25-Col. 6, lines 21).

Krisbergh does not explicitly disclose the at least one return information is independently transmitted from a TV signal;



Lancelot, in an analogous art, discloses the return data is independently transmitted from a TV signal (interpreted as the data such as terminal alert, data communication, etc. and video are transmitted in different networks, different time slot, or different channels, etc. – see include, but are not limited to, Fig. 2; Col. 4, lines 25-Col. 5, lines 17, col. 5, lines 35-55, col. 6, lines 20-36). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Krisbergh with the teaching as taught by Lancelot in order to provide a unified circuit switched and packet-based communications system architecture with network interworking functionality and would further increase the amount of data that Krisbergh system can be transmitted downstream on separate/independent channel.

Regarding claim 3, Krisbergh further discloses remote data entry and control means (Fig. 1, element 58 and Fig. 6), wirelessly (IR transmission) coupled to the at least at first data processing unit 96 of Fig. 6, for permitting a system user to control display of display signals on the television set 56 and enter data corresponding to the display of the display signal (Col. 4, lines 45-56 and Col. 8, lines 42-65).

Regarding claim 4, Krisbergh further discloses wherein the remote data entry and control means (Fig. 1, element 58) comprises an alphanumeric keyboard portion.

Regarding claim 5, Krisbergh further discloses wherein the alphanumeric keyboard portion (Fig. 1, element 58) is in infrared communication (Col. 8, lines 42-45) with the at least a first data processing unit 96 of Fig. 6.

Regarding claim 8, Krisbergh further discloses wherein wireless transfer network 12 is a satellite network that operates two-way communication (Col. 3, lines 24-27).

Regarding claim 9, it is inherent in the two-way satellite communication system to have one satellite for communicating data between two transceiver units, wherein a transceiver is traditionally an RF or RF-digital device that receives and transmits the signal to/from the satellite. Thus, Krisbergh meets the claimed limitation "wherein the satellite network includes at least one satellite for transferring signals between the 1<sup>st</sup> and 2<sup>nd</sup> RF transceiver units".

Regarding claim 10, Krisbergh a wide area network in Fig. 1 with elements router 40, CSU/DSU 42 connected to an ISP 60.

Regarding claim 11, Krisbergh discloses an ISP server in which a Mail server is inherently well known to be part of the ISP server (Col. 4, lines 59-65). Thus, Krisbergh meets the claimed limitation "wherein the WAN includes a Mail server."

Regarding claim 33, Krisbergh further discloses wherein the at least a first data processing unit (Fig. 6, el. 96) comprises:

Processing means 96, Input controlling means, operatively coupled to the processing means 54 and the remote data entry and control means 58, for receiving data and control information from the remote data and control means and providing the information to the processing means (Col. 4, lines 48-56); and

Display signal generating means, operatively coupled to the processing means 54, for generating the at least one display signal for display on the television set (by receiving a television program along with sequential portions of the "received information" inserted in the VBI, the Set Top Converter 54 generates a television program display, see Col. 4, lines 36-65);

In response to the at least one return information signal received by the processing means 54 and the data and control information from the remote data and control means (by receiving a television program along with sequential portions of the "received information" inserted in the VBI, the Set Top Converter 54 extracts a "received information" from VBI and displays the "received information" on the television 56, in response to the selection from the user input, see Col. 4, lines 36-65).

4. Claims 6-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Krisbergh et al. (US 5999970) in view Lancelot et al.(US 6026086) and further in view of Gorman (US 6141356).

Regarding claim 6, Krisbergh in view of Lancelot does not explicitly disclose wherein the remote data entry and control 58 means comprise a speakerphone portion.

Gorman discloses a set of radio devices (Fig. 3, elements 54-57) comprises the wireless speakerphone (Col. 7, lines 17-23). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Krisbergh in view of Lancelot to include the speakerphone as a data entry device as taught by Gorman in order to provide customers with the ability to communicate with the system giving it DTMF commands, and thus making it more convenient (Col. 7, lines 13-17).

Regarding claim 7, Gorman further discloses the speakerphone portions is in RF communication with the at least a first data processing unit (Col. 6, lines 64-67 where a first data processing unit combines items 53, 62 and the STB on top TV 69 of Fig. 3, see Col. 8, lines 53-56).

5. Claims 12-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Krisbergh et al. (US 5999970) in view of Lancelot et al.(US 6026086) and further in view of Arledge et al. (US 5561703).

Regarding claims 12-14, Krisbergh in view of Lancelot does not explicitly disclose the functional network is a paging network that includes a paging server and a plurality of pagers.

Arledge discloses the functional network being a paging network that includes a paging server and a plurality of pagers (Abstract, lines 6-9; Fig. 1, elements 3, 13 and 19).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Krisbergh in view of Lancelot by including the functional network being a paging network, that includes a paging server and a plurality of pagers in order to be able to deliver messages to the users on the road.

6. Claims 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Krisbergh et al. (US 5999970) in view of Lancelot et al.(US 6026086) and further in view of Cunningham et al. (US 5991596).

Regarding claims 15-16, Krisbergh in view of Lancelot does not disclose wherein the functional network is an emergency response network including a server.

Cunningham discloses the functional network containing an emergency response network including a server 18 (Col. 4, lines 29-43; Fig. 3). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Krisbergh in view of Lancelot by including the emergency services to the network, as taught by Cunningham, so to provide a "911" capability for interested subscribers (Col. 6, lines 38-40).

7. Claims 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Krisbergh et al. (US 5999970) in view of Lancelot et al.(US 6026086) and further in view of Tyroler (US 6320941).

Regarding claims 17-18, Krisbergh in view of Lancelot does not explicitly disclose wherein the at least a first data processing comprises indications means for indicating that at least one return information signal has been received wherein the indication means is an LED.

Tyroler discloses a device comprises having LED indicator for notifying user of incoming message (Fig. 1, Col. 2, lines 60-Col. 3, lines 4). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Krisbergh in view of Lancelot by including a LED indicator, as taught by Tyroler, in order to notify user of a received message (at least one return information signal has been arrived) without any prompting from the user (Col. 2, lines 5-8).

8. Claims 19-22, 26-28 and 34-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Krisbergh et al. (US 5999970) in view of Lancelot et al.(US 6026086) and further in view of Schein et al. (US 6263501).

Regarding claims 19-20, Krisbergh in view of Lancelot does not clearly disclose at least one display signal includes data to generate at least one menu-driven window on the TV set by the first communication unit.

Schein discloses at least one display signal includes data to generate at least one menu-driven window includes displayable information relating to E-Mail messages (Fig. 19A, element 14; Fig. 19B-C; Col. 23, lines 1-18) on the TV set by the STB unit Fig. 11. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Krisbergh in view of Lancelot to include at least one display signal including data to generate at least one menu-driven window including displayable information relating to E-Mail messages on the TV set, as taught by Schein, in order to provide to user a visual interface to interact with received information (Col. 2, lines 20-25).

Regarding claim 21, Schein further discloses a STB with processor (first data processing unit) generates a message string to be included as part of the at least one information signal containing information entered by the user in the E-Mail window "Create message" (Col. 23, lines 14-18).

Regarding claim 22, Krisbergh discloses the functional network is WAN (Fig. 1, Router, CSU/DSU and ISP) wherein a Mail server is inherently well known to be part of the ISP server (Col. 4, lines 59-65) and further wherein the server (Fig. 1, element 38), coupled

to the at least a second communication unit (Cable HeadEnd Equipment 36) provides the message string (one information signal and providing data included in the information signal) to the ISP 60 (Mail Server; Col. 4, lines 48-60).

Regarding claim 26, Schein further discloses wherein the at least one menu-driven window includes displayable information relating to financial market transactions (Fig. 21C-F).

Regarding claim 27, Schein further discloses a STB (first communication unit) generates a message string to be included as part of the at least one information signal containing information entered by the user in the financial transaction windows (Fig. 21D, Col. 23, lines 58-Col. 24, lines 6).

Regarding claim 28, Krisbergh discloses the functional network is WAN (Fig. 1, Router, CSU/DSU and ISP) wherein the server (Fig. 1, HeadEnd Server 38), coupled to the at least a second communication unit (Cable HeadEnd Equipment 36) provides the message string (one information signal and providing data included in the information signal) to the WAN.

Regarding claim 34, Schein further discloses wherein the at least one display signal generated by the display signal generating means is a digital signal and wherein the 1<sup>st</sup> data processing unit further comprises D/A conversion means, operatively coupled to



the display signal generating means, for converting the digital display signal to analog form for display on the TV set (Col. 6, lines 29-43).

Regarding claim 35, Krisbergh discloses that the system could transmit E-Mail, Chat-room message and alike by using a keyboard (Col. 4, lines 45-56), wherein the keyboard signal supposedly is a digital signal that converts to analog signal and then it combines with the incoming signal from the HeadEnd (analog) in order to display the command and the video data on the TV set. Thus Krisbergh meets and encompasses the claimed limitation "a signal combiner, operatively coupled between the D/A conversion means and the TV set, for combining the analog display signal with at least another analog signal received from the wireless transfer network and providing the combined signals to the TV set."

9. Claims 23-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Krisbergh et al. (US 5999970) in view of Lancelot (US 6026086), and further in view of Schein et al. (US 6263501), and further in view of Yuen (US 5812931).

Regarding claims 23-24, Krisbergh view of Lancelot and Schein do not clearly disclose displayable information relating to paging messages wherein the message string to be included as part of the at least one information signal containing information entered by the user in the paging windows.

Yuen discloses the TV displaying and sending the paging messages (Fig.1 and 3; Abstract; Col. 1, lines 61-64). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Krisbergh in view of Lancelot and Schein to include displayable information relating to a paging message, as taught by Yuen, in order to offer to user an alternative way of communication such as two-way paging system, by taking the advantage the current cable network infrastructure (Col. 3, lines 4-7).

10. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Krisbergh et al. (US 5999970) in view of Lancelot (US 6026086), and further in view of Schein et al. (US 6263501), and further in view of Yuen (US 5812931) and further in view of Arledge et al. (US 5561703).

Regarding claim 25, Krisbergh in view of Lancelot, Schein and Yuen do not clearly disclose pager server; However, Krisbergh discloses wherein the server (Fig.1, HeadEnd Server 38), coupled to the at least a second communication system (Cable HeadEnd 34) provides the message string (one information signal and providing data included in the information signal) to the functional network (WAN or Internet) and Yuen discloses a functional network is a paging network (Fig. 3, elements 37 and 38).

Arledge Fig. 1 discloses the PBX 3 is connected to the paging server 13 (voice response unit 17 of Fig. 1, Col. 4, lines 45-58). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Krisbergh

in view of Lancelot, Schein and Yuen by having a paging server, as taught by Arledge, in order to permit it to be customized by each user for his preferred settings (Col. 4, lines 1-30).

11. Claims 29-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Krisbergh et al. (US 5999970) in view of Lancelot (US 6026086), and further in view of Schein et al. (US 6263501), and further in view of Cunningham et al. (US 5991596).

Regarding claims 29 and 30, Krisbergh in view of Lancelot does not disclose the menu-driven window includes displayable information relating to emergency message and wherein the message string to be included as part of the at least one information signal containing information entered by the user in the emergency message windows;

Schein discloses the menu-driven window includes displayable information relating to receiving/sending message (Fig. 19A, element 14; Fig. 19B-C; Col. 23, lines 1-18) on the TV set by the STB unit Fig. 11. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Krisbergh in view of Lancelot by including at least one display signal includes data to generate at least one menu-driven window includes displayable information relating to sending/receiving (E-Mail) messages on the TV set, as taught by Schein, so to provide to user a visual interface to interact with received information (Col. 2, lines 20-25).

Krisbergh in view of Lancelot and Schein do not clearly disclose "displayable information relating to emergency message and wherein the message string to be

included as part of the at least one information signal containing information entered by the user in the emergency message.”

Cunningham discloses the functional network 24 containing an emergency response network for routing emergency messages to corresponding users (Col. 4, lines 29-43; Fig. 2, 3). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Krisbergh in view of Lancelot and Schein by including the emergency services to the network, as taught by Cunningham, so to provide an add-on “911” capability for interested subscribers (Col. 6, lines 38-40).

Regarding claim 31, In combination with claims 1, 19, 29 and 30, Krisbergh discloses a server (Fig. 1, element 38), coupled to the at least a second communication system (Cable HeadEnd 34) provides the message string (one information signal and providing data included in the information signal) to the functional network WAN.

Cunningham discloses the functional network 24 is an emergency response network 24 having an emergency response server 18 for routing emergency messages to corresponding users (Col. 4, lines 29-43; Fig. 2, 3, element 24) through Internet 17 and Broadcast Satellite Ground Terminal 19.

Therefore, it would have been obvious to replace Krisbergh’s functional network WAN (Fig. 1, elements 38, 40, 42) to Cunningham’s functional network 24 (emergency response network) coupled to an emergency response server 18, as

taught by Cunningham, in order to provide a two-way service "911" capability for interested subscribers (Col. 6, lines 38-40).

12. Claims 36-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Krisbergh et al. (US 5999970) in view of Lancelot (US 6026086), and further in view of Yasuki (US 6285407).

Regarding claim 36, Krisbergh discloses a wireless information signal (Wireless network; Col. 3, lines 17-27) transfer interactive television system (Col. 1, lines 60-Col. 2, lines 35) comprises:

a 1<sup>st</sup> communication system (Fig. 1, e. 54,16,56,58), operatively coupled to a television set (Fig. 1, element 56), comprising a 1<sup>st</sup> RF transceiver unit and a 1<sup>st</sup> data processing unit (Fig. 6, set top convert 54 has an RF transceiver 94 and 106 and processor 96), for generating at least one information signal ("the command input into the Set Top Converter 54 by the inputting device 58 wherein the Set Top Converter 54 generates a display signal "text/command signal" for display on the television set 56 such as on-line Chat sessions, URL for browsing through the information source... see Fig. 6, Col. 4, lines 51-65 and then the text/command signal is transmitted by an upstream transmitter 106 on an RF-modulated upstream channel 22 ...", Col. 4, lines 48-55) and for generating at least one display signal for display on the television set (by receiving a television program along with sequential portions of the "received information" inserted in the VBI at the Set Top Converter

54, the Set Top Converter 54 generates a television program display or extracts a "received information" from VBI, and then the Set Top Converter 54 displays the received TV programming or the received information on the television 56 respectively, see Col. 4, lines 36-65).

Remote keyboard device (Fig. 1, element 58), wirelessly coupled to 1<sup>st</sup> data processing unit (Fig. 6, set top convert 54 has an RF transceiver 94 and 106 and processor 96), for permitting a system user to control display of display signals on the television set 56 and enter data corresponding to the display of the display signal (Col. 4, lines 45-56 and Col. 8, lines 42-65).

Krisbergh further discloses wherein wireless transfer network 12 is a satellite network (Col. 3, lines 24-27), operatively coupled to the first transceiver unit (Fig. 6, set top convert 54 has an RF transceiver 94 and 106 and processor 96), for wirelessly transferring signals including the at least one information signal ("the command input into the terminal 54" by the inputting device 58 wherein the terminal 54 generates a display signal "text/command signal" for display on the television set 56 such as on-line Chat sessions, URL for browsing through the information source... see Fig. 6, Col. 4, lines 51-65 and then the text/command signal is transmitted by an upstream transmitter 106 on an RF-modulated upstream channel 22 ...", Col. 4, lines 48-55);

A wireless signal transfer network operatively coupled to the at least a first communication unit (terminal 54), for wirelessly transferring signals including the at least one information signal;

A second communication system (Fig. 1, element 36), operatively coupled to the network 12 (Satellite network; Col. 3, lines 17-27), inherently comprising a 2<sup>nd</sup> RF transceiver unit and a 2<sup>nd</sup> data processing unit for receiving and processing the at least one information signal (Cable HeadEnd equipment 36 receives the inputted "command" on the upstream channel of the distribution network 12; Col. 4, lines 48-60);

A server (Fig.1, element 38), operatively coupled to the second communication system (Cable HeadEnd 36), for processing the at least one information signal (a 'command') and providing data included in the information signal to a functional network 60 (the HeadEnd Server 38 receives the forwarding "command" from the Cable HeadEnd Equipment 36, then the HeadEnd Server 38 transmits a 'command' based on the forward command to the information source 60; Col. 4, lines 48-60,

Limitation "wherein the server retrieves return data from the network" reads on Krisbergh 's information source 60 (functional network) transmits the 'information' to the HeadEnd Server 38 (server) in which the HeadEnd Server 38 receives/retrieves/processes the 'information', see Col. 6, lines 49-53 and Col. 9, lines 8-10.

Limitation "and provides the return data to the at least a second communication system" reads on the HeadEnd Server 38 receives/retrieves/processes the 'information' and then forwards/provides the 'information' (return data) to the VBI inserter 90 of the Cable HeadEnd Equipment 36 (a second communication unit), see Col. 6, lines 47-52; Col. 7, lines 32-35.

"The second communication system generating at least one return information signal and providing the at least one return information signal to the satellite network, the satellite network wirelessly transferring the at least one return

information signal to the at least a first communication unit, which generates the at least one display signal for display on the TV set" further reads on the VBI inserter 90 of the Cable HeadEnd Equipment 36 (a second communication unit) generates respective downstream channel 20 (return information signal) to the network 12 (satellite network; Col. 3, lines 17-27), see Col. 7, lines 35-57 and to the terminal 54 for demodulating and displaying on the TV set, see Col. 8, lines 18-60 .

wherein the at least one information signal ("command") is independently transmitted from a TV signal (could be read on either the 'command' is from the upstream channel and is independently/separate from the downstream channel, or the Cable HeadEnd Equipment 36 (a TV signal) and the HeadEnd server 38 independently transmits the received 'command' (information signal) from the set top converter 54 to the ISP 60, see Col. 5, lines 25-Col. 6, lines 21).

Krisbergh does not explicitly disclose the at least one return information is independently transmitted from a TV signal;

Lancelot, in an analogous art, discloses the return data is independently transmitted from a TV signal (see discussion in the rejection of claim 1 and Fig. 2; Col. 4, lines 25-Col. 5, lines 17). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Krisbergh with the teaching as taught by Lancelot in order to provide a unified circuit switched and packet-based communications system architecture with network interworking functionality, and furthermore, to increase the amount of data that can be transmitted downstream.



Krisbergh in view of Lancelot does not clearly disclose displaying at least one display signal superimposed on a conventional television signal. However, Krisbergh's system suggests that the process of rendering screen for display by a screen renderer or the like is well known and need not to be further described here (Col. 7, lines 18-20).

Yasuki discloses a television terminal (Fig. 1) with a mass storage device 134, a signal combiner 116 and displaying at least one display signal superimposed on a conventional television signal (Fig. 4A-C; Col. 7, lines 58-Col.8, lines 27). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Krisbergh's system in view of Lancelot with a signal combiner and displaying at least one display signal superimposed on a conventional television signal, as taught by Yasuki, so to provide a multi-function TV receiver which is capable of executing process related to objects which are transmitted in a accompany with TV signals and objects which are utilized in network including servers for improving utility value and achieving convenience (Col. 3, lines 15-20).

Regarding claim 37, it is inherent for the two-way satellite communication system to have a satellite for transferring signal between the 1<sup>st</sup> and 2<sup>nd</sup> RF transceiver units (satellite antenna), wherein a transceiver is traditionally an RF or RF-digital device that receives and transmits the signal to/from the satellite. Thus, Krisbergh meets

the claimed limitation “wherein the satellite network includes at least one satellite for transferring signal between the 1<sup>st</sup> and 2<sup>nd</sup> RF transceiver units.”

Regarding claim 38, Krisbergh further discloses the network coupled to the server (HeadEnd Server 38) is a wide area network in Fig. 1 with elements router 40, CSU/DSU 42 connected to an ISP 60.

Regarding claim 39, Krisbergh further discloses wherein the WAN is the Internet (Col. 4, lines 57-65).

13. Claim 40 is rejected under 35 U.S.C. 103(a) as being unpatentable over Krisbergh et al. (US 5999970) in view of Lancelot (US 6026086), and further in view of Yasuki (US 6285407) and further in view of Arledge et al. (US 5561703).

Regarding claim 40, Krisbergh in view of Lancelot and Yasuki do not show that the functional network is a paging network that includes a paging server and a plurality of pagers.

Arledge discloses the functional network being a paging network that includes a paging server and a plurality of pagers (Abstract, lines 6-9; Fig. 1, elements 3, 13 and 19). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Krisbergh in view of Lancelot and Yasuki by including the functional network being a paging network, that includes a paging server and a

plurality of pagers, as taught by Arledge, in order to be able to deliver messages to the users on the road.

14. Claim 41 is rejected under 35 U.S.C. 103(a) as being unpatentable over Krisbergh et al. (US 5999970) in view of Lancelot (US 6026086), and further in view of Yasuki (US 6285407) and further in view of Cunningham et al. (US 5991596).

Regarding claim 41, Krisbergh in view of Lancelot and Yasuki do not disclose wherein the functional network is an emergency response network including a server.

Cunningham discloses the functional network containing an emergency response network including a server 18 (Col. 4, lines 29-43; Fig. 3). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Krisbergh in view of Lancelot and Yasuki by including the emergency services to the network, as taught by Cunningham, in order to provide a "911" capability for interested subscribers (Col. 6, lines 38-40).

15. Claims 42-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Krisbergh et al. (US 5999970) in view of Lancelot (US 6026086), and further in view of Yasuki (US 6285407) and further in view of Tyroler (US 6320941).

Regarding claims 42-43, Krisbergh in view of Lancelot and Yasuki do not disclose wherein the at least a first data processing unit comprises indications means wherein the indication means is an LED.

Tyroler discloses a device comprises having LED indicator for notifying user of incoming message (Fig. 1, Col. 2, lines 60-Col. 3, lines 4). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Krisbergh in view of Lancelot and Yasuki by including a LED indicator, as taught by Tyroler, so notify user of a received message (at least one return information signal has been arrived) without any prompting from the user (Col. 2, lines 5-8).

16. Claim 44 is rejected under 35 U.S.C. 103(a) as being unpatentable over Krisbergh et al. (US 5999970) in view of Lancelot (US 6026086), and further in view of Yasuki (US 6285407) and further in view of Schein et al. (US 6263501).

Regarding claim 44, Krisbergh in view of Lancelot and Yasuki do not clearly disclose at least one display signal includes data to generate at least one menu-driven window on the TV set by the first data processing unit.

Schein discloses at least one display signal includes data to generate at least one menu-driven window includes displayable information relating to E-Mail messages (Fig. 19A, element 14; Fig. 19B-C; Col. 23, lines 1-18) on the TV set by the STB unit Fig. 11. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Krisbergh in view of Lancelot

and Yasuki by including at least one display signal includes data to generate at least one menu-driven window includes displayable information relating to E-Mail messages on the TV set, as taught by Schein, so to provide to user a visual interface to interact with received information (Col. 2, lines 20-25).

### **(10) Response to Argument**

A. The Combination of Krisbergh and Lancelot Does Not Disclose or Fairly Suggest The Invention of Claim 1 as a Whole (pages 13-19).

Appellant argues Krisbergh does not disclose any specifics on how the access (10) would be configured under a wireless network (page 14, paragraph 3).

In response, the claims do not recite how the access system would be configured under a wireless network. Claims 1 and 36 merely recite “a wireless signal transfer network” for transferring data. Krisbergh suggests using a wireless signal transfer network (satellite network, terrestrial wireless cable system, and the like – col. 3, lines 24-26).

Appellant further argues Applicant's application teaches away from the subject matter of Krisbergh because Krisbergh access system relies entirely on the television cable distribution network to transmit information and return signals dependently on television signal transmission system (page 14, paragraph 4-page 16).

In response, the Examiner respectfully traverses.

Krisbergh does not rely entirely on the television cable distribution network. The cable television distribution network is just one embodiment of the invention. In fact, Krisbergh discloses the television distribution systems and networks include but are not limited to orbiting satellite systems, terrestrial wireless cable systems, and the like (col. 3, lines 25-27). The Examiner relies on Lancelot for the teaching of at least one return information signal are independently transmitted from a television signal (interpreted as data, alert information, etc. and television signal (e.g., video) are transmitted in different networks, time slots, or different channels (see include, but are not limited to, Fig. 2; Col. 4, lines 25-Col. 5, lines 17, col. 5, lines 35-55, col. 6, lines 20-36 , and discussion in the rejection of claims 1 and 36 above).

Appellant additionally argues Appellant's specification teaches against the user of cable networks and telephone lines for network access due to problems associated therewith. One of ordinary skill in the art would actually view the teaching of Krisbergh and Lancelot with regard to communication using cable TV network to be essentially irrelevant and actually teach away from the claimed invention (page 17, paragraph 1).

This argument is respectfully traversed. The claims do not recite the teaching against the user of cable network and telephone lines...

The claims recite "a wireless signal transfer network..." The Examiner relies on Krisbergh for the teaching of wireless signal transfer network (interpreted as satellite network or wireless cable system (col. 3, lines 25-27).

Therefore, the teaching of Krisbergh and Lancelot does not teach away from the claimed inventions.

Appellant argues Examiner does not explain or justify why one of ordinary skill in the art would be motivated to modify the Krisbergh system with the teaching of Lancelot so that the Krisbergh system would “transmit return information signal independent of the TV signal.” The Examiner merely states in conclusory fashion that it would be obvious to modify Krisbergh with Lancelot because it “would further increase the amount of data that Krisbergh system can be transmitted downstream on separate independent channel”. There is no suggestion or motivation to make the proposed modification. The Examiner’s proposed modification of Krisbergh would fundamentally change the principle and purpose of the Krisbergh system (page 17, paragraph 2-page 19, paragraph 2). These arguments are respectfully traversed.

In response to Appellant’s argument that the Examiner does not explain or justify when one of ordinary skill in the art would be motivated to modify the Krisbergh system with the teaching of Lancelot..., the Examiner has provided at least one reason that motivate one of ordinary skill in the art to modify Krisbergh system with the teaching of Lancelot (i.e., to increase the amount of data transmitted downstream – see Office Action, dated 01/05/2007, page 9.

In response to appellant's argument that there is no suggestion/motivation to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the

claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the suggestion/motivation to combine the references is found in the knowledge generally available to one of ordinary skill in the art. In particular, both Krisbergh and Lancelot disclose two-way communication systems for transmitting data, video from one location to another location. Krisbergh discloses transmitting data using VBI, however, Krisbergh does not disclose transmitting data/return information independently from a television signal is prohibited or exclusive in Krisbergh.

In addition, All the claimed elements (including transmitting data independently from a television signal) were known in the prior art (see at least the combination of Krisbergh in view of Lancelot as discussed in the rejection of claim 1 above) and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination would have yielded predictable results to one of ordinary skill in the art at the time of the invention (e.g., to increase amount of data transmitted downstream on separate/independent channel.)

Therefore, the combination of Krisbergh would not fundamentally change the principle and purpose of the Krisbergh system. The combination is proper.

B. The Combination of Krisbergh, Lancelot, and Yasuki Does Not Disclose or Fairly Suggest the Invention of Claim 36 as a Whole (pages 19-20).



Appellant's arguments are similar to Appellant's arguments that given above for claim 1. Therefore, the Examiner's responses to the arguments are similar to the responses for claim 1 in section A above.

C. Claims 6-7 (page 20).

please see response to arguments in section A above.

D. Claims 12-14 (page 20).

please see response to arguments in section A above.

E. Claims 15-16 (page 20).

please see response to arguments in section A above.

F. Claims 17-18 (page 21).

please see response to arguments in section A above.

G. Claims 1-22, 26-28, 34-35 (page 21).

please see response to arguments in section A above.

H. Claims 23-24 (page 21).

please see response to arguments in section A above.

I. Claim 25 (page 21).

please see response to arguments in section A above.

J. Claims 29-31 (page 21).

please see response to arguments in section A above.

K. Claim 40 (page 21).

please see response to arguments in section A above.

L. Claim 41 (page 22).

please see response to arguments in section A above.

M. Claims 42-43 (page 22).

please see response to arguments in section A above.

N. Claim 44 (page 22).

please see response to arguments in section A above.

**(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/Son P Huynh/

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